

What is claimed is:

- 1 1. An automated service handoff system, comprising:
2 a service registry including a list of available services;
3 a mobile device associated with a current location, wherein the mobile
4 device includes a list of preferred services, wherein the mobile device is capable of
5 sending a query including a service location associated with the current location and
6 at least one selected member of the list of preferred services to the service registry,
7 and wherein the mobile device is capable of receiving a response to the query from
8 the service registry including at least one selected member of the list of available
9 services; and
10 a location determination module capable of determining the current location of the
11 mobile device and capable of being communicatively coupled with the mobile
12 device.
- 1 2. The automated service handoff system of claim 1, wherein the service
2 registry is an extensible markup language-based registry.
- 1 3. The automated service handoff system of claim 1, wherein the list of
2 available services includes a service provider, a service type, and a service location
3 for the at least one selected member of the list of available services.
- 1 4. The automated service handoff system of claim 1, wherein the mobile device
2 is capable of being bound to the at least one selected member of the list of available
3 services.
- 1 5. The automated service handoff system of claim 1, wherein the location
2 determination entity is included in the mobile device.

1 6. The automated service handoff system of claim 5, wherein the location
2 determination entity includes a global positioning system receiver.

1 7. The automated service handoff system of claim 1, wherein the mobile device
2 includes a memory in which a plurality of location signatures are stored.

1 8. The automated service handoff system of claim 1, further comprising:
2 a computer capable of being communicatively coupled with the mobile
3 device and transmitting the list of preferred services to the mobile device.

1 9. The automated service handoff system of claim 1, further comprising:
2 at least one computer capable of publishing the at least one selected member
3 of the list of available services to the service registry.

1 10. A mobile device, comprising:
2 a processor module;
3 a local memory communicatively coupled to the processor module and
4 capable of storing a list of preferred services, a current location of the mobile
5 device, and a previous location of the mobile device; and
6 a communications medium interface communicatively coupled to the
7 processor module and capable of being communicatively coupled to a service
8 registry for sending a query including a service location associated with the current
9 location of the mobile device and at least one selected member of the list of
10 preferred services to the service registry.

1 11. The mobile device of claim 10, further comprising:
2 a location determination module capable of determining the current location
3 of the mobile device.

1 12. The mobile device of claim 10, further comprising:
 2 a timer coupled to the processor module for determining a service query
 3 update interval.

1 13. The mobile device of claim 10, further comprising:
 2 a comparator coupled to the processor module for determining whether a
 3 selected number of services are available for binding to the mobile device.

1 14. A method of automating service handoff operations, comprising:
 2 determining a current location of a mobile device;
 3 sending a first query including a service location associated with the current
 4 location and at least one selected member of a list of preferred services associated
 5 with the mobile device to a service registry;
 6 receiving a response to the query from the service registry including at least
 7 one selected member of a list of available services maintained by the service
 8 registry; and
 9 binding the at least one selected member of the list of available services
 10 maintained by the service registry to the mobile device.

1 15. The method of claim 14, further including:
 2 determining that the mobile device has moved to a new current location; and
 3 sending a second query including a service location associated with the new
 4 current location and the at least one selected member of the list of preferred services
 5 associated with the mobile device to the service registry.

1 16. The method of claim 15, wherein determining that the mobile device has
 2 moved to a new current location further includes:
 3 storing the current location as a previous location;
 4 determining the new current location of the mobile device; and
 5 determining that the new current location is not the same as the previous location.

- 1 17. The method of claim 15, further including:
2 determining that a polling interval time period has ended.
- 1 18. The method of claim 14, further including:
2 storing a plurality of location signatures in a memory of the mobile device.
- 1 19. The method of claim 18, further including:
2 determining that the mobile device has moved to a new current location; and
3 recalling a selected one of the plurality of location signatures associated with
4 the new current location.
- 1 20. The method of claim 15, further including:
2 informing a user of the mobile device that the at least one selected member
3 of the list of preferred services associated with the mobile device is not available for
4 use by the mobile device.
- 1 21. The method of claim 20, further including:
2 binding an alternative available service to the mobile device.
- 1 22. The method of claim 14, further including:
2 determining that a quality of service associated with the at least one selected
3 member of the list of available services included in the service registry has
4 degraded; and
5 binding an alternative available service to the mobile device.
- 1 23. The method of claim 22, further including:
2 retrieving the quality of service associated with the at least one selected
3 member of the list of available services.

1 24. The method of claim 23, wherein retrieving the quality of service associated
2 with the at least one selected member of the list of available services includes:
3 retrieving the quality of service associated with the at least one selected
4 member of the list of available services from the service registry.

1 25. The method of claim 23, wherein retrieving the quality of service associated
2 with the at least one selected member of the list of available services includes:
3 retrieving the quality of service associated with the at least one selected
4 member of the list of available services from a service provider associated with the
5 at least one selected member of the list of available services.

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